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Applicant	: Rodney S. Daughtrey	Art Unit	: 2179
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Title	: GRAPHICAL USER INTERFACE FOR TRAVEL PLANNING SYSTEM		

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APPEAL BRIEF ON BEHALF OF RODNEY S. DAUGHTREY

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(1) Real Party in Interest

The real party in interest in the above application is ITA Software, Inc.

(2) Related Appeals and Interferences

The appellant is not aware of any appeals or interferences related to the above-identified patent application.

(3) Status of Claims

This is an appeal from the decision of the Primary Examiner in an office action dated June 28, 2006, finally rejecting claims 1-49, all of the claims in the application. Appellant filed a Notice of Appeal on September 28, 2006.

(4) Status of Amendments

Appellant filed a Reply to the Final Office Action that corrected minor errors in the specification and drawings. No amendments were made to the claims. The examiner indicated entry of the amendment. All previously filed amendments have been entered.

(v.) Summary of Claimed Subject Matter

Claim 1

Appellant's claim 1 is directed to a graphical user interface for a travel planning system. "Referring now to FIG. 3, a web page 70 that depicts results from the server process 16 executing a query entered via the query page (FIG. 2) is shown." [FIG. 3 and Appellant's Specification Page 4, lines 23-25].

Inventive features of Appellant's claim 1 include a tabular region having a plurality of cells, "The web page 70, includes a table 72 that summarizes travel options." [FIG. 3 and Appellant's Specification Page 4, lines 25-26] the tabular region comprising cells arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options, "As shown in FIG. 3, with the airline tab 74a selected, the summary information in the table is arranged in rows and columns with here each of the airlines arranged in columns of

the table as links and each of the rows of the table 74 arranging specified travel options such as nonstop flights or one-stop flights, as links. Interior cells within the table 74 are links which correspond to prices for each of the airlines with respect to each of the travel options." [FIG. 3 and Appellant's Specification Page 4, line 31 to page 5, line 6] and with the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell. "Selecting a cell (by clicking on a URL in this case) displays, in the lower pane, a listing of the travel options for that particular cell. Each travel option contains a 'details' URL link in the row of information devoted to that travel option; clicking on that link take (sic) the traveller (sic) to yet a third level of information, a detailed description of that travel option as shown in FIGS. 4 and 5." [FIG. 3 and Appellant's Specification Page 5, lines 17-24].

Inventive features of Appellant's claim 1 also include a second region that displays aspects of the subset of the travel options resulting from selecting the respective cell in the tabular region. "... displays, in the lower pane, a listing of the travel options for that particular cell." [FIG. 3 and Appellant's Specification Page 5, lines 19-20].

Claim 10

Claim 10 is directed to a method for displaying travel options. "A general procedure to construct the graphical user interface is given below:" [Appellant's Specification Page 6, lines 1-2] and "The graphical user interface is populated by obtaining a list of query-specific travel options. For each criteria the process will enumerate bins for this criteria ..." [Appellant's Specification Page 8, lines 3-5].

Inventive features of Appellant's claim 10 include compartmentalizing travel options into bins according to a set of criteria of the travel options. "1) Obtain list of query-specific travel options. 2) For each criteria in travel options: Enumerate bins for the criteria

For each travel option T: Place travel option T into some bin

3) Given the bins computed in (2), compute intersections of bins to determine what bins go in what cells of the summary table." [Appellant's Specification Page 6, lines 4-10].

Inventive features of Appellant's claim 10 also include displaying a summary of the travel options in a graphical user interface according to the bins. "4) Generate and display

summary table given information from procedure (3)." [Appellant's Specification Page 6, lines 11-12].

Claim 20

Claim 20 is directed to a graphical user interface for a travel planning system. This feature is supported as the analogous feature of claim 1.

Inventive features of Appellant's claim 20 include a tabular region "table 72 that summarizes travel options." [FIG. 3 and Appellant's Specification Page 4, line 26] of the graphical user interface that displays criteria of a set of travel options as a plurality of cells "The table displays a set of air travel options according to specified criteria, e.g., the airlines used in one or more of the travel options (displayed from left to right at the top of the table), and the number of stops or connections in the set of travel options. Here, the travel options represented by a given table cell are those options which use the airline in the same column as that cell, and that have the same number of stops as the "number of stops" header in the same row as that cell." [FIG. 3 and Appellant's Specification Page 5, lines 6-14] that act as controls "Thus, the links in the table 72 are used to control the display of travel options in the results frame 76." [FIG. 3 and Appellant's Specification Page 6, lines 25-26] which when selected, displays aspects of a subset of the travel options according to a criterion or criteria corresponding to the control selected. "The table displays a set of air travel options according to specified criteria, e.g., the airlines used in one or more of the travel options (displayed from left to right at the top of the table), and the number of stops or connections in the set of travel options. Here, the travel options represented by a given table cell are those options which use the airline in the same column as that cell, and that have the same number of stops as the "number of stops" header in the same row as that cell." [Appellant's Specification Page 5, lines 6-14].

Claim 27

Claim 27 is directed to a computer program product residing on a computer readable medium for displaying travel options. "Travel system 10 can includes (sic) a server computer 12 having a computer memory or storage media 14 storing a server process 15. The server process 15 can include a scheduler process 16 and a faring process 18. An example of a scheduler

process 16 is described in copending U.S. Patent Application Serial No. 09/109,622, entitled "Scheduler System for Travel Planning Systems", filed on July 2, 1998 by Carl G. DeMarcken et al. and assigned to the assignee of the present invention and incorporated herein by reference. [FIG. 1 and Appellant's Specification Page 2, lines 26 to page 3, line 4].

Inventive features of Appellant's claim 27 include instructions to compartmentalize travel options into bins according to a set of criteria. This feature is supported as the analogous feature of claim 10.

Inventive features of Appellant's claim 27 also include instructions to display a summary of the travel options in a graphical user interface according to the bins. This feature is supported as the analogous feature of claim 10.

Claim 32

Claim 32 is directed to a computer program product residing on a computer readable medium for rendering a graphical user interface for displaying travel options. This feature is supported as the analogous feature of claim 27.

Inventive features of Appellant's claim 32 include instructions to display a tabular region having a plurality of cells arranged, the tabular region having the cells arranged in plural columns and plural rows with the cells displaying criteria of a set of travel options, and with the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell. This feature is supported as the analogous feature of claim 1.

Inventive features of Appellant's claim 32 also include instructions to display a second region of aspects of selected travel options resulting from selecting the respective cell in the tabular region. This feature is supported as the analogous feature of claim 1.

Claim 40

Claim 40 is directed to a method for generating a graphical user interface. This feature is supported as the analogous feature of claim 10.

Inventive features of Appellant's claim 40 include receiving travel options. "The information to have the server produce the set of pricing solutions is obtain (sic) from a user

entering data in a graphical user interface as will be described below. In addition, the set of pricing solutions are also displayed to the user through the graphical user interface." [Appellant's Specification Page 3, lines 17-21 and Page 6, line 3].

Inventive features of Appellant's claim 40 also include determining bins for criteria included in the travel options. "... 2) For each criteria in travel options: Enumerate bins for the criteria For each travel option T: Place travel option T into some bin ... ." [Appellant's Specification Page 6, lines 4-10].

Inventive features of Appellant's claim 40 also include associating the travel options with the bins according to the criteria. "For each travel option T: Place travel option T into some bin." [Appellant's Specification Page 6, lines 6-7].

Inventive features of Appellant's claim 40 also include determining intersections of the bins according to the criteria. "compute intersections of bins to determine what bins go in what cells of the summary table." [Appellant's Specification Page 6, lines 8-10].

Inventive features of Appellant's claim 40 also include generating a table based at least in part on the intersections of the bins. "4) Generate and display summary table given information from procedure (3)." [Appellant's Specification Page 6, lines 11-12].

Inventive features of Appellant's claim 40 also include displaying the table as a graphical user interface with dimensions of the table corresponding to the bins determined according to the criteria. "The summary table 74 segments or compartmentalizes travel options into bins, according to criteria that the user might use to select a specific travel option." [Appellant's Specification Page 7, line 23-25].

Claim 45

Claim 45 is directed to a computer program product for generating a graphical user interface. This feature is supported as the analogous feature of claim 27.

Inventive features of Appellant's of claim 45 include instructions to receive travel options. This feature is supported as the analogous feature of claim 40.

Inventive features of Appellant's claim 45 also include instructions to determine bins for criteria included in the travel options. This feature is supported as the analogous feature of claim 40.

Inventive features of Appellant's claim 45 also include instructions to associate the travel options with the bins according to the criteria. This feature is supported as the analogous feature of claim 40.

Inventive features of Appellant's claim 45 also include instructions to determine intersections of the bins according to the criteria. This feature is supported as the analogous feature of claim 40.

Inventive features of Appellant's claim 45 also include instructions to generate a table based at least in part on the intersections of the bins. This feature is supported as the analogous feature of claim 40.

Inventive features of Appellant's claim 45 also include instructions to display the table as a graphical user interface with dimensions of the table corresponding to the bins determined according to the criteria. This feature is supported as the analogous feature of claim 40.

(vi.) Grounds of Rejection to be Reviewed on Appeal

1. Claims 1-6, 8, 10-49 stand rejected under 35 U.S.C. 102(e) as being anticipated by de Marcken et al. (US Pat. 6,307,572) hereinafter de Marcken.

2. Claims 7 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over de Marcken et al. in view of Ran et al. US. 6,209,026 (Ran).

(7) Argument

Anticipation

"It is well settled that anticipation under 35 U.S.C. §102 requires the presence in a single reference of all of the elements of a claimed invention." *Ex parte Chopra*, 229 U.S.P.Q. 230, 231 (BPA&I 1985) and cases cited.

"Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim." *Connell v. Sears, Roebuck & Co.*, 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983).

"This court has repeatedly stated that the defense of lack of novelty (i.e., 'anticipation') can only be established by a single prior art reference which discloses each and every element of

the claimed invention." *Structural Rubber Prod. Co. v. Park Rubber Co.*, 223 U.S.P.Q. 1264, 1270 (Fed. Cir. 1984), citing five prior Federal Circuit decisions since 1983 including *Connell.*

In a later analogous case the Court of Appeals for the Federal Circuit again applied this rule in reversing a denial of a motion for judgment n.o.v. after a jury finding that claims were anticipated. *Jamesbury Corp. v. Litton Industrial Prod., Inc.*, 225 U.S.P.Q. 253 (Fed. Cir. 1985).

After quoting from *Connell*, "Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim," 225 U.S.P.Q. at 256, the court observed that the patentee accomplished a constant tight contact in a ball valve by a lip on the seal or ring which interferes with the placement of the ball. The lip protruded into the area where the ball will be placed and was thus deflected after the ball was assembled into the valve. Because of this constant pressure, the patented valve was described as providing a particularly good seal when regulating a low pressure stream. The court quoted with approval from a 1967 Court of Claims decision adopting the opinion of then Commissioner and later Judge Donald E. Lane:

> [T]he term "engaging the ball" recited in claims 7 and 8 means that the lip contacts the ball with sufficient force to provide a fluid tight seal **** The Saunders flange or lip only sealingly engages the ball 1 on the upstream side when the fluid pressure forces the lip against the ball and never sealingly engages the ball on the downstream side because there is no fluid pressure there to force the lip against the ball. The Saunders sealing ring provides a compression type of seal which depends upon the ball pressing into the material of the ring. *** The seal of Saunders depends primarily on the contact between the ball and the body of the sealing ring, and the flange or lip sealingly contacts the ball on the upstream side when the fluid pressure increases. 225 U.S.P.Q. at 258.

Relying on *Jamesbury*, the ITC said, "Anticipation requires looking at a reference, and comparing the disclosure of the reference with the claims of the patent in suit. A claimed device is anticipated if a single prior art reference discloses all the elements of the claimed invention as arranged in the claim." *In re Certain Floppy Disk Drives and Components Thereof*, 227 U.S.P.Q. 982, 985 (U.S. ITC 1985).

Obviousness

"It is well established that the burden is on the PTO to establish a prima facie showing of obviousness, *In re Fritsch*, 972 F.2d. 1260, 23 U.S.P.Q.2d 1780 (C.C.P.A., 1972)."

"It is well established that there must be some logical reason apparent from the evidence or record to justify combination or modification of references. *In re Regal*, 526 F.2d 1399 188, U.S.P.Q.2d 136 (C.C.P.A. 1975). In addition, even if all of the elements of claims are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill in the art would have been prompted to combine the teachings of the references to arrive at the claimed invention. Id. Even if the cited references show the various elements suggested by the Examiner in order to support a conclusion that it would have been obvious to combine the cited references, the references must either expressly or impliedly suggest the claimed combination or the Examiner must present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention obvious in light of the teachings of the references. *Ex Parte Clapp*, 227 U.S.P.Q.2d 972, 973 (Board. Pat. App. & Inf. 985)."

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

> Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

> Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original, footnotes omitted).

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

(1) Claims 1-6, 8, 10-49 are not anticipated by de Marcken et al. (US Pat. 6,307,572).

Claims 1, 6, 32, 33, and 35-39

For the purposes of this appeal only, claims 1, 6, 32, 33, and 35-39 stand or fall together. Appellant's claim 32 is representative of this group of claims.

Claim 32 is directed to a computer program product ... for rendering a graphical user interface for displaying travel options. Claim 32 is neither described nor suggested by de Marcken. Specifically, de Marcken fails to suggest instructions to ... display a tabular region having a plurality of cells arranged, the tabular region having the cells arranged in plural columns and plural rows with the cells displaying criteria of a set of travel options, and with the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell and display a second region of aspects of selected travel options resulting from selecting the respective cell in the tabular region.

The examiner contends that:

> **As to claims 1, 18 and 32, DeMarcken et al. discloses a computer implemented method and corresponding apparatus of a graphical user interface for a travel planning system comprising the steps/means for a tabular region of the graphical user interface that displays summarized criteria of a set of travel options as a plurality of cells that act as controls (See Figure 20, 352, column 1, lines 48 through column 2, lines 10). DeMarcken et al. cites "...a graphical region of the graphical user interface that displays a graphical representation of the itinerary information.. .The graphical user interface displays a total fare associated with a corresponding itinerary in the graphical representation.. . ."read as the region of the graphical user**

> **interface and " . . . .The one control include a nonstop control, direct control, same airline control.. . The graphical user interface has an itinerary region that displays a selected itinerary including information pertaining to segments of the itinerary.." read as the plurality of cells that act as controls; a second region that displays selected travel options resulting from filtering the set of travel options in accordance with a control actuated in the tabular region (see Figures 21, 22, column 57, lines 20-56). DeMarcken et al. also cites "...The graphical user interface has user selectable controls such as Origin and Destination. There are also controls for selecting time and date.. .The origin and destination controls invoke a query window.. . .The server process returns to the client process a set of pricing solutions in a compact representation ... .Region depicts a listing of airports in a region about the location entered in area, whereas area lists origins and destinations of a flight slice.. ." read as the second region that displays selected travel options in accordance with a control actuated in the tabular region.**

Appellant contends that de Marcken fails to describe or suggest claim 32, whether at the relied on passages or elsewhere. Claim 32 is distinct over de Marcken because de Marcken neither describes nor suggests ... instructions to display a tabular region having a plurality of cells ... arranged in plural columns and plural rows. de Marcken also does not describe that the cells display criteria of a set of travel options or that the cells are controls that when selected provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell. de Marcken also does not teach instructions to display a second region aspects of selected travel options resulting from selecting the respective cell in the tabular region.

The examiner appears to construe de Marcken's itinerary region and the nonstop, direct, and same airline controls as a tabular region having a plurality of cells.

In de Marcken FIGS. 22 to 26, is shown a bar graph user interface. The itinerary region relied on by the Examiner neither describes nor suggests the features of the tabular region comprising cells arranged in plural columns and plural rows. Neither the itinerary region nor the controls in de Marcken are arranged in a tabular region of plural columns and plural rows. Moreover, de Marcken does not teach the cells displaying a summary of a criterion of a set of travel options.

In the final action, the examiner further explained the rejection as follows:

> **Applicant has argued that deMarcken does not describe a tabular region having a plurality of cells. However, the examiner respectfully disagrees because the interface is shown in figures 22-27 contains plurality of bargraphs that represent plurality of cells. These bar-graphs are arranged in columns and rows. Each of the bar-graph acts as a control which display information when it is selected (figure 23, the second region (382) displays when one of the "JFK cell" is selected). It is clearly**

that the second region (382) displays a summary of travel information when one of the cell is selected.

Appellant contends that the examiner's construction of de Marcken's plurality of bar graphs to correspond to "a tabular region having a plurality of cells, ... arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options, ..." is totally unreasonable and unwarranted, and improperly uses Appellant's claims as a road map to misinterpret the reference.

The examiner takes the position that the bar graphs depict a tabular region. Appellant contends that this construction is illogical and unreasonable interpretation of de Marcken and moreover does not describe or suggest what Appellant has claimed.

de Marcken depicts a series of horizontal bars that together provide a bar graph representation of a like number of pricing solutions. The bars do not summarize according to criteria pricing solutions, but instead pictorially represent, *inter alia*, flights segments of pricing solutions and stopovers between flights. In short the bar graph neither describes nor suggests the claimed "tabular region with plural cells "arranged in plural columns and plural rows." In addition, Appellant contends that de Marcken does not show "... the cells displaying a summary of a criterion of a set of travel options ... ." No reasonable construction of de Marcken can construe de Marcken as teaching a tabular region with plural cells "arranged in plural columns and plural rows" with the cells displaying a summary of a criterion of a set of travel options ... .

In de Marcken, a bar graph does not represent a summary of travel options according to a criterion, as contended by the examiner but rather, the bar graph disclosed by de Marcken represents a single pricing solution (i.e., the combination of a flight or flights with a fare that can result in a single ticket). Unlike claim 1, the bar graph does not summarize a criterion of a set of travel options. Rather, each "bar" in the bar graph is a pictorial representation of a specific travel option. The bar provides a visual depiction of the duration of flights segments between origin and destination.

Applicant also considers it illogical and unreasonable for the examiner to construe the "bars" in the bar graph as being arranged in "columns and rows" in an attempt to interpret de Marcken as teaching the claimed tabular region. While the examiner argues that the bars in the bar graph are arranged in rows, these rows are unrelated to one another each being a unique

travel option and therefore that construction of de Marcken is illogical. Moreover, it is certainly illogical to argue that the different bars are arranged in columns, since there is no logical meaning to ascribe to columns of bars in the bar graphs in the de Marcken reference.

Claim 1 further distinguishes since de Marcken fails to disclose that the bar graph correspond to "cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell and a second region that displays aspects of the subset of the travel options resulting from selecting the respective cell in the tabular region." de Marcken teaches that selecting one of the bars launches a window that depicts details of the travel option represented by the one bar. (See, for example, Fig. 23 where window 23 is overlaid on the window 352 of Fig. 22.) In contrast, claim 1 features that the cell is a control that, when selected, provides a subset of the travel options. de Marcken does not select a bar graph to provide a subset of the travel options that correspond to the respective criterion or criteria of the cell, since the bar of the bar graph already depicts the travel option, whereas the cells in claim 1 depict a summary (according to a criterion or criteria) of a group of travel options. Thus, when the cell is selected, the group of travel options summarized in that cell is provided according to claim 1.

In construing features of claim 1 such as "a tabular region having a plurality of cells, the tabular region comprising cells arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options" as reading "the interface [is] shown in figures 22-27 contains plurality of bar graphs that represent plurality of cells" in de Marcken, the Examiner ignores guidance from the Federal Circuit.

In re Morris[1] stands for the proposition that while the Office is entitled to construe claim terms using their "broadest reasonable meaning," the Examiner must apply the Court's guidance on what "reasonable" means:

> "Since it would be unreasonable for the PTO to ignore any interpretive guidance afforded by the applicant's written description, either phrasing connotes the same notion: as an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of

[1] *In re Morris*, 127 F.3d 1048 (Fed. Cir. 1997).

> ordinary skill in the art, *taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description* contained in the applicant's specification." [emphasis supplied]

According to *Morris,* the examiner must apply the broadest reasonable meaning "in their ordinary usage as they would be understood by one of ordinary skill in the art." The examiner has not provided any basis upon which one of ordinary skill in the art would construe the bar graphs of Figures 22-27 of de Marcken as disclosing the claimed tabular region or cells. In *Morris*, the specification lacked any text to guide the Examiner in construing what the disputed claim term meant. Based on the absence of any such text, the Court stated that the Examiner's interpretation was reasonable:

> Absent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to their interpretation does not make the PTO's definition unreasonable when the PTO can point to other sources that support its interpretation.

In the present application, the written description discusses the interfaces in great detail and specifically discusses the structure and operation of the tabular region. There is no ambiguity, as there was in *Morris*. Nevertheless, the examiner, by construing tabular region and cells to read on the bar graphs taught by de Marcken, improperly ignores guidance offered by Appellant's specification and the meaning given to those terms by the art and indeed ordinary common usage.

Applicant does not ask the examiner to read limitations into the claims as was the case in *In re Van Geuns*[2]. In *Van Geuns*, the specification disclosed a magnet assembly used for NMR. The claim, however, recited a magnet assembly that provided a uniform magnetic field, with no mention of NMR. The cited reference disclosed a magnet assembly that generated a relatively uniform field. *Van Geuns* is inapplicable to the present case, because the claim element "a tabular region having a plurality of cells, the tabular region comprising cells arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options," are expressly defined in the specification and positively recited in the claim.

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[2] *In re Van Geuns*, 988 F.2d 1181 (Fed. Cir. 1993).

This is not a case in which the claim recites a "region" and the Examiner is being asked to import the specification's description of a "tabular region" to mean "region." Rather, this is a case in which the claim recites a particular feature and the examiner must find that feature in the prior art and not conflate it with a misinterpretation of the prior art. So, the specification is available to the examiner to help her understand what the feature of: "a tabular region having a plurality of cells, the tabular region comprising cells arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options" means.

Thus, it is well established that in construing a claim term, the Examiner may properly review the specification. In the present case, the Examiner is attempting to construe Appellant's claims without the benefit of the guidance offered by Appellant's specification. In rejecting such guidance, the Examiner has been cast adrift, so much so that she now confuses an "a tabular region having a plurality of cells ... arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options" with "a bar graph."

In order to sustain a rejection under 35 U.S.C. 102(b) the anticipating prior art reference must disclose all of the elements of a claimed invention arranged as in the claim. Applicant contends that for at least the foregoing reasons, de Marcken fails to satisfy this burden, either literally or based on the examiner's construction of de Marcken.

Claims 2 and 5

For the purpose of this appeal only, claims 2 and 5 stand or fall together. Claim 2 is representative of this group of claims.

Claim 2 further limits claim 1, and requires that interior cells that intersect at least one column and at least one row display a value that summarizes travel options that meet a pair of criteria according to the criterion in a respective one of the columns and the criterion in a respective one of the rows. In the final rejection, the examiner argues that:

> **Applicant argues the reference does not teach the interior cells that intersect at least one column and at least one row display a value that summarizes travel options. However, one of the bar-graph (JFK) being arranged in at least one column and at least one row displays a second region (figure 23, 382) of summarizes travel options when the bar-graph is selected (column 58, lines 58-67).**

The examiner appears to argue that (JFK) is a bar graph, which is not correct, since de Marcken teaches that element 376a is an element of the bar graph 376 of which JFK denotes a stopover between legs 377b and 377d of the bar graph element 376a. The examiner argues that "[JFK] "being arranged in at least one column and at least one row displays a second region (figure 23, 382) of summarizes (sic) travel options when the bar-graph is selected (column 58, lines 58-67)." This is not what claim 2 requires. Rather, claim 2 requires that interior cells ... display a value that summarizes travel options that meet a pair of criteria according to the column and row for that cell.

The examiner's analysis requires selecting the bar-graph to display a second region that summarizes travel options. This analysis does not meet the claim language as noted above and indeed is incorrect, since the analysis is contrary to the teachings of de Marcken. In de Marcken, window 382 does not summarize travel options, but rather displays details of the particular travel option represented by the selected bar graph element.

Claims 3 and 4

For the purpose of this appeal only, claims 3 and 4 stand or fall together. Claim 3 is representative of this group of claims.

Claim 3 further limits claim 1, and requires that the controls in the tabular region are arranged in columns and where upon actuation of one of the controls in a column that is an exterior column "causes results to be displayed in the second region as a grouping of travel options according to the criterion corresponding to the exterior column." The examiner argues that:

> **As to claims 3 and 22, DeMarcken et al. teach the controls in the tabular region arranged in columns and rows and where upon actuation of one of the controls in a column (Figure 20,1st Class, 2nd Class, Refundable and Nonstop, Direct, Online, Select; Figure 23, (382) column 58, line 58 through column 59, line 9) that is an exterior column causes result to be displayed in the second region as a grouping of travel options according to the criterion corresponding to the exterior column (figure 23, the second region (382) displays when one of the "JFK cell" is selected).**

The examiner appears to argue that the de Marcken discussion of 1st Class, 2nd Class, Refundable and Nonstop, Direct, Online, Select correspond to exterior cells of the table, which is not correct, for the reasons discussed above. The examiner also argues that "an exterior column

causes result to be displayed in the second region as a grouping of travel options according to the criterion corresponding to the exterior column." While this is true, this is not what claim 3 requires. Rather, claim 3 requires actuation of ... an exterior column "causes results to be displayed in the second region as a grouping of travel options according to the criterion corresponding to the exterior column.

In claim 3, there is a tabular region and a second region. The examiner's analysis requires however that the travel options be displayed in what she characterizes as the tabular region not the second region that displays the travel options. This analysis does not meet the claim language.

Claim 8

The examiner argues that the tabular region features including at least one of an airline tab, an airport tab and a flight time tab is taught by de Marcken in the table of figure 27, which is "American air", "LAX LOS ANGELES."

As argued of record de Marcken does not teach a tabbed table, these features from de Marcken are controls, not tabs of a tabbed table.

The examiner states that FIG. 24 depicts a tabbed table, but does not say where the tabs on the table are in de Marcken. FIG. 24 is reproduced below.

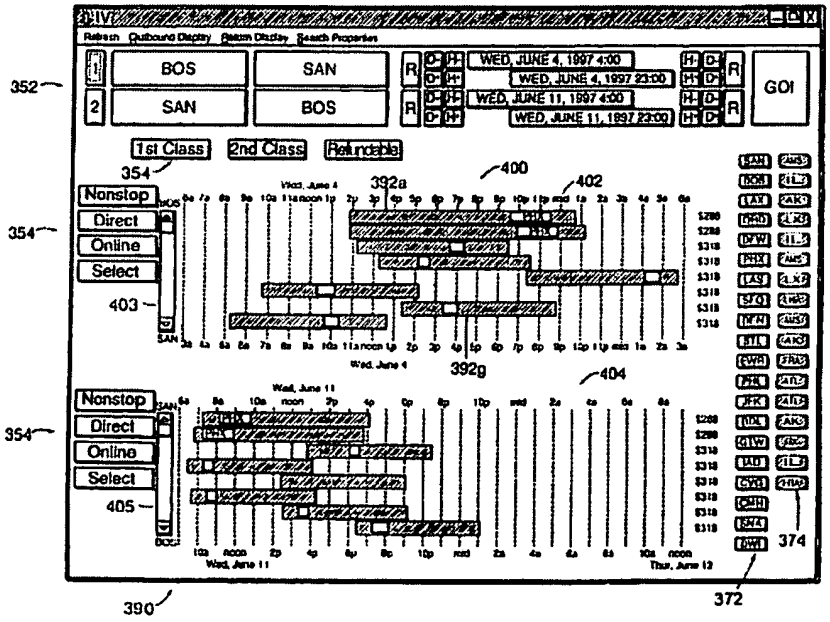

FIG. 24

In contrast, Appellant has also reproduced FIG. 3 from the instant case that shows an example of a tabbed table with an airline tab, an airport tab and a flight time tab clearly denoted.

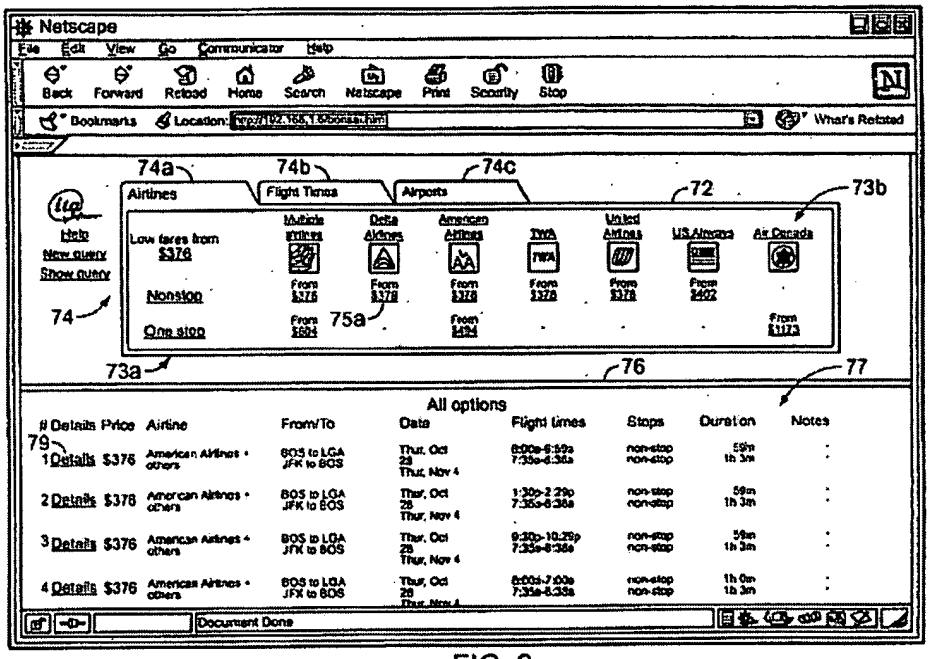

FIG. 3

Appellant contends that de Marcken's FIG. 24 does not show a table, nor a tabbed table, nor has the examiner advanced any logical reasoning why a tabbed table is shown by de Marcken. During prosecution, Appellant had asked the examiner to kindly point out the "tabs" in the "tabbed table" in de Marcken in order to assist Applicant in prosecution of the application. The examiner failed to so point out the tabs.

Claims 10, 11, 14, 15, 27, 28 and 31

For the purpose of this appeal only, claims 10, 11, 14, 15, 27, 28 and 31 stand or fall together. Claim 10 is representative of this group of claims.

Claim 10 is directed to a method for displaying travel options. Claim 10 includes compartmentalizing travel options into bins according to a set of criteria of the travel options and displaying a summary of the travel options in a graphical user interface according to the bins.

The examiner contends that:

> **As to claims 10 and 27, DeMarcken et al. demonstrates compartmentalizing travel options into 'bins', according to a set of criteria (Figure 20, bin Nonstop, bin Direct, bin Online, bin Select, a set of criteria Origin, Destination).**

Claim 10 is distinct over de Marcken, since de Marcken does not describe the features of Nonstop, Direct Online, etc as bins nor does de Marcken describe compartmentalizing travel options into bins. According to claim 10, the method requires compartmentalizing the travel options into bins according to a set of criteria of the travel options and displaying a summary of the travel options in a graphical user interface according to the bins. de Marcken does neither. de Marcken teaches instead that Nonstop, Direct, Online, Select, Origin, Destination, are controls:

> **The window 370 also includes a series of user preference controls 354, here "Nonstop", "Direct", "Online (on the same airline)" and "Select" shown as not activated and "1st class", "2nd class" and "Refundable" shown activated. The Nonstop, Direct and Online controls when selected by a user will eliminate all components from the pricing solution that do not correspond to nonstop, direct or online flights. A select control operates in conjunction with the user marking one or more potential pricing solutions such that the numbers which appear shaded out are activated. When one or more of the pricing solutions are activated and the select button is pressed, the client process extracts pricing solutions from the pricing graph. The "1st class", "2nd class" and "Refundable" controls when activated eliminate fares that do not correspond to these classes of travel. (de Marcken Col. 57, line 66 to Col. 58, line 33]**

de Marcken thus does not describe these controls resulting from compartmentalizing of travel solutions into bins, but instead describes: "The window 370 has a graphical region that provides a visual representation of pricing solutions extracted from the pricing graph 38'." de Marcken does not teach displaying a summary of the travel options in a graphical user interface according to the bins. Rather, de Marcken teaches that:

> **The window 370 also includes a listing 372 of airports involved in the results provided from the pricing graph 38', as well as, a listing 374 of airlines. The window 370 has a graphical region that provides a visual representation of pricing solutions extracted from the pricing graph 38'. One preferred representation of the pricing solution is a horizontal bar graph 376. The itineraries are ordered by increasing total fare with each entry 376a of the bar graph corresponding to a set of flight segments on airlines that provide travel from the origin (e.g., `ESB`) to the destination (e.g., SAN, San Diego International Airport) on airlines coded in accordance with the legends for the airline in listing 374 with stopovers denoted by**

> **airports. The bar graph representation displays a metric of the pricing solution in a graph format.**

Thus, rather than teaching displaying a summary of the travel options according to the bins, de Marcken teaches to display bar graph representations of the actual travel options. Rather than summarizing travel options, de Marcken teaches to extract the travel options using the controls and display a representation of the travel options.

In rejecting claim 10, the examiner stated that: "Applicant argues deMarcken does not teach the features of Nonstop, Direct Online. However, the tabs of Nonstop, Direct Online are shown in the interface of figure 27. Each of tab (sic) displays a summarized travel option when selected."

As argued, Claim 10 is distinct over de Marcken, since de Marcken does not describe the features of Nonstop, Direct Online, etc as bins. Rather, these are controls that link to enumeration algorithms to extract pricing solutions from a pricing graph, Nonstop, Direct Online, etc are not bins.

Claims 12 and 29

For the purpose of this appeal only, claims 12 and 29 stand or fall together. Claim 12 is representative of this group of claims.

With respect to claim 12, the examiner argues that:

> **Applicant argues deMarcken does not describe a table. However, the interfaces are shown in figures 22-27 are tables. The claimed language itself "displaying criteria associated with the bins in a two-dimensional table" is still not specific and clear enough to describe the present invention. During patent examination, the pending claims must be "given >their< broadest reasonable interpretation consistent with the specification." > In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000).**
>
> **Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).**

Claim 12 further limits claim 10, and requires displaying criteria associated with the bins in a two-dimensional table, with one criterion assigned to each dimension of the table. de Marcken does not describe or suggest a two-dimensional table, nor does the reference describe or suggest to assign one criterion to each dimension of the table. Applicant maintains that the

interfaces depicted in Figures 22-27 are not tables or tabular regions. However, even under the examiner's interpretation of de Marcken, de Marcken fails to show one criterion assigned to each dimension of the "table." Appellant has addressed above the role of the examiner's interpretation during patent examination. Appellant agrees that the examiner should give the pending claims their broadest reasonable interpretation consistent with the specification, (*In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000)), however, the examiner must be mindful of what constitutes "reasonable." See *Morris* above. Indeed, Appellant has not asked the examiner to read limitations from the specification into the claims, in contravention to *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993) but has merely asked the examiner to reasonably construe the prior art and Appellant's claims with reference to the teachings of the prior art and Appellant's specification.

Claims 13 and 30

For the purpose of this appeal only, claims 13 and 30 stand or fall together. Claim 13 is representative of this group of claims.

Claim 13 distinguishes over de Marcken since de Marcken neither describes nor suggests ... displaying criteria associated with the bins in a two-dimensional table, with one criterion assigned to each dimension of the table, and with a third criterion depicted in each cell that is an interior cell of the table.

This feature is directed to the aspect that the table can represent three criteria of a travel option. de Marcken discloses that the interior of the interface is the bar graph or itinerary region. No reasonable construction of de Marcken would suggest that the bar graphs or itinerary region depicts a third criterion of a travel option, along with the other two criteria assigned to the other two dimensions of the claimed table.

Claim 16

Claim 16 further limits claim 10, and requires selecting a cell from the table and producing specific information related to that cell and presenting the produced information in a user interface. de Marcken does not possess the claimed cells, as discussed above. The bar graphs and controls are not cells of a table.

Claim 17

Claim 17 further limits claim 16 requiring that the information produced is a listing of travel options. Selecting a bar graph in de Marcken does not provide a listing of travel options but instead a listing of details of the travel option selected by selecting the bar graph.

Claim 18

Claim 18 further limits claim 10 by requiring displaying the graphical user interface as a tabbed table. de Marcken does not suggest a tabbed table, as discussed above. de Marcken further does not describe arranging the tabbed table according to an airline tab, an airport tab and a flight time tab. de Marcken does not suggest that each tab includes a tabular region that displays summarized criteria of the set of travel options as a plurality of cells that act as controls according to the bins ...

The examiner contends that: "DeMarcken et al. teach displaying the graphical user interface as a tabbed table, a first tab being an airline tab, a second tab being airport tab and a third tab being a flight time tab (figures 27), ..." Again, the examiner conflates unrelated features of the prior art reference without reasonably construing the features of the claims in view of applicant's specification and what the art understands those features to be. One of ordinary skill in the art would not view the airline, airport and flight time features of figure 27 of de Marcken as tabs of a tabbed table. Indeed, "flight times" is in Figure 27 of de Marcken. If the examiner construes flight times to correspond to the arrival and departure histograms depicted in figure 27, clearly those are not tabs of a tabbed table. Rather, Figure 27 depicts histograms. Also, the airline and airport items in figure 27 are described by de Marcken as controls, not tabs of a tabbed table. Selecting an airline control in de Marcken filters the bar graphs to display only those travel options that are or involve that selected airline, whereas selecting an airport tab in claim 18 causes the travel options to be arranged in bins according to airline. Inherently, de Marcken neither describes that feature nor the feature of claim 18, where "each tab including a tabular region that displays summarized criteria of the set of travel options as a plurality of cells that act as controls according to the bins."

Claim 19

Claim 19 further limits claim 11, requiring that the table is a tabbed table having a plurality of tabs and compartmentalizing travel options into bins according to a set of criteria, comprises displaying the resulting bins in a first tab of the table, with one criterion assigned to each of two dimensions of the table, and with additional criteria depicted in corresponding additional ones of the plurality of tabs of the tabbed table. de Marcken does not depict a table, a tabbed table or the feature of compartmentalizing travel options into bins according to a set of criteria. In particular, de Marcken does not suggest to depict additional criteria by using tabs of the tabbed table.

Claims 20, 21 and 25

For the purpose of this appeal only, claims 20, 21 and 25 stand or fall together. Claim 20 is representative of this group of claims.

Claim 20 is directed to a graphical user interface for a travel planning system. Claim 20 includes the feature of a tabular region ... that displays criteria of a set of travel options as a plurality of cells that act as controls, which when selected, displays aspects of a subset of the travel options according to a criterion or criteria corresponding to the control selected.

The examiner contends that:

> **As to claim 20, DeMarcken et al. teach a tabular region of the graphical user interface that displays criteria of a set of travel options as a plurality of cells that act as controls, which when selected, displays aspects of a subset of the travel options according to a criterion or criteria corresponding to the control selected. (See Figure 20, 352, column 1, lines 48 through column 2, lines 10).**

Appellant contends that de Marcken fails to describe or suggest claim 20, whether at the relied on passages or elsewhere. Claim 20 is distinct over de Marcken because de Marcken neither describes nor suggests a tabular region ... that displays criteria of a set of travel options as a plurality of cells that act as controls.

In de Marcken FIGS. 22 to 26, is shown a bar graph user interface. The itinerary region relied on by the Examiner does not possess the features of the tabular region of cells that act as controls. In de Marcken neither the bars in the bar graph nor the controls outside of the bar

graph are arranged in a tabular region. Moreover, de Marcken does not teach the cells display criteria of a set of travel options as a plurality of cells.

As argued above, the examiner's further comments regarding de Marcken is an unreasonable construction of the reference. de Marcken's bar graphs do not describe a tabular region having a plurality of cells, ... While the examiner has taken the position that the bar graphs depict a tabular region that is an illogical and unreasonable interpretation of de Marcken, since, in construing de Marcken in this manner, the Examiner ignores guidance on how to construe claim terms using their "broadest reasonable meaning," *In re Morris*[3]

In order to sustain a rejection under 35 U.S.C. 102(b), the anticipating prior art reference must disclose all of the elements of a claimed invention arranged as in the claim. Applicant contends that for at least the foregoing reasons, de Marcken fails to satisfy this burden, either literally or based on the examiner's construction of de Marcken.

Claims 22-24

Claims 22-24 each separately distinguish over de Marcken.

Claim 22 distinguishes since the reference neither describes nor suggests that the controls ... are arranged in a column, and ... upon actuation of one of the controls in the column, causes results to be displayed as a grouping of travel options according to a criterion ... corresponding to the actuated control.

Claim 23 distinguishes since the reference does not describe that the controls in the tabular region are arranged in rows and columns and ... actuation of one of the controls in a peripheral one of the rows or columns, causes the results to be displayed ... in accordance with the criterion corresponding to the one control.

Claim 24 distinguishes since de Marcken fails to describe that controls in the tabular region are arranged in rows and columns and ... actuation of ... an interior ... cell ... displayed ... in accordance with criteria corresponding to the intersection of a corresponding row and a corresponding column.

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[3] *In re Morris*, 127 F.3d 1048 (Fed. Cir. 1997).

Claim 26

Claim 26 limits claim 20 calling for the tabular region to be a tabbed table including at least one of an airline tab, an airport tab and a flight time tab. de Marcken does not describe a table or a tabbed table.

Claim 34

Claim 34 further limits the computer program product of claim 32 and includes instructions to display a listing of the subset of travel options associated with selecting the control. Selecting a bar graph in de Marcken does not provide a listing of travel options but instead a listing of details of the travel option selected by selecting the bar graph.

Claim 40

Claim 40 is directed to a method for generating a graphical user interface. Claim 40 includes the features of ... determining bins for criteria included in the travel options, associating the travel options with the bins according to the criteria, determining intersections of the bins according to the criteria, generating a table based at least in part on the intersections of the bins and displaying the table ... with dimensions of the table corresponding to the bins determined according to the criteria. de Marcken does not describe or suggest at least these features. de Marcken does not associate travel options with bins according to any determined criteria. Rather, de Marcken enumerates travel options from a pricing graph representation of such travel options.

In contrast, were de Marcken to use this feature, de Marcken would enumerate travel options by extracting them from the pricing graph to provide a set of such travel options (referred to as travel solutions in de Marcken). de Marcken would then use the features of claim 40, which are not described or suggested in de Marcken as follows: de Marcken would take the set of travel options and use them to determine bins for criteria. The travel options would be associated with the bins according to the criteria and intersections of the bins would be determined according to the criteria in order to generate a table to display. The table would have dimensions corresponding to the bins determined according to the criteria.

Claims 41-44 and 45-49

For the purpose of this appeal only, claims 41-44 and 45-49 stand or fall together. Claim 41 is representative of this group of claims.

Claim 41 further limits claim 40 requiring that a bin comprises a value associated with a respective criterion. For instance in FIG. 3 reproduced above the value "$376" represents a summary of all fares for all travel options at $376 or above. Other bins are represented as criteria such as "Delta," "Nonstop" "$402" and so forth.

(2) Claims 7 and 9 are allowable with their respective base claims.

Claims 7-9

For the purposes of this appeal only, claims 7-9 are allowable over the combination of de Marcken with Ran.

Claim 7, which recites that the graphical user interface of claim 6 is implemented as a web page and the controls are hyperlinks to the enumeration routines and claim 9, which limits claim 1 to graphical user interface represented in a first web page and the results region displays itineraries and includes links that invoke a second web page to display details of the itineraries are not suggested by the combination of de Marcken with Ran, since at least for the reason that the references fail to show features of the base claims and Ran the secondary reference fails to address any of the missing teachings in de Marcken.

Conclusion

Appellant submits that claims 1-49 are allowable over the art of record and are proper under 35 U.S.C. 112, second paragraph. Therefore, the Examiner erred in rejecting Appellant's claims and should be reversed.

Respectfully submitted,

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Appendix of Claims

1. A graphical user interface for a travel planning system comprises:

a tabular region having a plurality of cells, the tabular region comprising cells arranged in plural columns and plural rows with the cells displaying a summary of a criterion of a set of travel options, and with the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell; and

a second region that displays aspects of the subset of the travel options resulting from selecting the respective cell in the tabular region.

2. The graphical user interface of claim 1 wherein interior cells that intersect at least one column and at least one row displaying a value that summarizes travel options that meet a pair of criteria according to the criterion in a respective one of the columns and the criterion in a respective one of the rows.

3. The graphical user interface of claim 1 wherein the controls in the tabular region arranged in columns and where upon actuation of one of the controls in a column that is an exterior column causes results to be displayed in the second region as a grouping of travel options according to the criterion corresponding to the exterior column.

4. The graphical user interface of claim 1 with actuation of one of the controls in one of the rows or columns on the periphery of the tabular regions the results to be displayed in the results region as a grouping of travel options in accordance with a summary of a criterion corresponding to the selected control.

5. The graphical user interface of claim 1 wherein upon actuation of one of the controls that is an interior one of the cells in the rows and columns, causes the results to be displayed as a grouping of travel options in accordance with criteria corresponding to the intersection of a corresponding row and a corresponding column.

6. The graphical user interface of claim 1 wherein the controls are links to routines that invoke an appropriate enumeration algorithm.

7. The graphical user interface of claim 6 wherein the interface is implemented as a web page and the controls are hyperlinks to the enumeration routines.

8. The graphical user interface of claim 1 wherein the tabular region is a tabbed table comprising at least one of an airline tab, an airport tab and a flight time tab.

9. The graphical user interface of claim 1 wherein the graphical user interface is represented in a first web page and the results region displays itineraries and includes links that invoke a second web page to display details of the itineraries.

10. A method for displaying travel options comprises:

compartmentalizing travel options into bins according to a set of criteria of the travel options; and

displaying a summary of the travel options in a graphical user interface according to the bins.

11. The method of claim 10 wherein displaying a summary comprises:

displaying criteria associated with the bins as cells in a table.

12. The method of claim 10 wherein compartmentalizing travel options into bins according to a set of criteria, comprises:

displaying criteria associated with the bins in a two-dimensional table, with only one criterion assigned to each dimension of the table.

13. The method of claim 10 wherein compartmentalizing travel options into bins according to a set of criteria, comprises:

displaying criteria associated with the bins in a two-dimensional table, with one criterion assigned to each dimension of the table, and with a third criterion depicted in each cell that is an interior cell of the table.

14. The method of claim 10 wherein the criteria involved include one or more airlines or other carriers of passengers, number of stops that the carrier makes en route to destinations, departure times, arrival times, time ranges, carriers involved in travel options, locations that carriers depart or arrive from, cost of travel options, ticket restrictions and airline safety records.

15. The method of claim 14 wherein a third criterion is depicted in each cell that is an interior cell of the table.

16. The method of claim 10 further comprising:

selecting a cell from the table; and

producing specific information related to that cell; and

presenting the produced information in a user interface.

17. The method of claim 16 wherein the information is a listing of travel options.

18. The method of claim 10 wherein displaying a summary in the graphical user interface comprises:

displaying the graphical user interface as a tabbed table, a first tab being an airline tab a second tab being airport tab and a third tab being a flight time tab, with each tab including a tabular region that displays summarized criteria of the set of travel options as a plurality of cells that act as controls according to the bins; and

actuating one of the controls to display selected travel options in accordance with the bin corresponding to the control.

19. The method of claim 11 wherein the table is a tabbed table having a plurality of tabs and compartmentalizing travel options into bins according to a set of criteria, comprises:

displaying the resulting bins in a first tab of the table, with one criterion assigned to each of two dimensions of the table, and with additional criteria depicted in corresponding additional ones of the plurality of tabs of the tabbed table.

20. A graphical user interface for a travel planning system comprises:

a tabular region of the graphical user interface that displays criteria of a set of travel options as a plurality of cells that act as controls, which when selected, displays aspects of a subset of the travel options according to a criterion or criteria corresponding to the control selected.

21. The graphical user interface of claim 20 wherein the controls in the tabular region are arranged in a rectangular manner.

22. The graphical user interface of claim 20 wherein the controls in the tabular region are arranged in a column, and where upon actuation of one of the controls in the column, causes results to be displayed as a grouping of travel options according to a criterion of the set of travel options, with the criteria corresponding to the actuated control.

23. The graphical user interface of claim 20 wherein the controls in the tabular region are arranged in rows and columns and wherein, upon actuation of one of the controls in a peripheral one of the rows or columns, causes the results to be displayed as a grouping of travel options in accordance with the criterion corresponding to the one control.

24. The graphical user interface of claim 20 wherein the controls in the tabular region are arranged in rows and columns and wherein, upon actuation of one of the controls that is an interior one of the cells in the rows and columns, causes the results to be displayed as a grouping of travel options in accordance with criteria corresponding to the intersection of a corresponding row and a corresponding column.

25. The graphical user interface of claim 20 wherein the controls are links to routines that invoke an appropriate enumeration algorithm.

26. The graphical user interface of claim 20 wherein the tabular region is a tabbed table comprising at least one of an airline tab, an airport tab and a flight time tab.

27. A computer program product residing on a computer readable medium for displaying travel options comprises instructions for causing a computer to:

compartmentalize travel options into bins according to a set of criteria; and

display a summary of the travel options in a graphical user interface according to the bins.

28. The computer program product of claim 27 wherein instructions to display a summary, comprises instructions to:

display criteria associated with the bins as cells in a table.

29. The computer program product of claim 27 wherein instructions to compartmentalizing travel options into bins according to a set of criteria, comprises instructions to:

display criteria associated with bins in a two-dimensional table, with one criterion assigned to each dimension of the table.

30. The computer program product of claim 27 wherein instructions to:

compartmentalize travel options into bins according to a set of criteria, comprises instructions to:

display criteria associated with the bins in a two-dimensional table, with one criterion assigned to each dimension of the table, and with a third criterion depicted in each cell of the table.

31. The computer program product of claim 27 wherein the criteria include one or more of airlines or other carriers of passengers, number of stops that the carrier makes en route to destinations, departure time, arrival times, time ranges, carriers involved in travel options, locations that carriers depart from or arrive at, cost of travel options, ticket restrictions and airline safety records.

32. A computer program product residing on a computer readable medium for rendering a graphical user interface for displaying travel options comprises instructions for causing a computer to:

display a tabular region having a plurality of cells arranged, the tabular region having the cells arranged in plural columns and plural rows with the cells displaying criteria of a set of travel options, and with the cells being controls that when selected, provide a subset of the travel options that correspond to the respective criterion or criteria of the selected cell; and

display a second region of aspects of selected travel options resulting from selecting the respective cell in the tabular region.

33. The computer program product of claim 32 wherein the criteria comprise a carrier, a departure location, an arrival location, a departure time, an arrival time, a trip duration, a number of stops or a travel date.

34. The computer program product of claim 32 further comprising instructions to:

display a listing of the subset of travel options associated with selecting the control.

35. The computer program product of claim 32 wherein the tabular region has criteria further arranged as tabbed windows.

36. The computer program product of claim 32 wherein the second region is part of a common window with the tabular region juxtaposed with the tabular region.

37. The computer program product of claim 36 further comprising instructions to:

display a listing of the subset of travel options associated with selecting the control.

38. The computer program product of claim 34 further comprising instructions to:

display with the control a value of a third criterion.

39. The computer program product of claim 34 further comprising instructions to cause an operating system of the computer to:

display the interface on a output device.

40. A method for generating a graphical user interface, the method comprising:

receiving travel options;

determining bins for criteria included in the travel options;

associating the travel options with the bins according to the criteria;

determining intersections of the bins according to the criteria;

generating a table based at least in part on the intersections of the bins; and

displaying the table as a graphical user interface with dimensions of the table corresponding to the bins determined according to the criteria.

41. The method of claim 40 wherein a bin comprises a value associated with a respective criterion.

42. The method of claim 40 wherein displaying the table displays the table with each of the bins rendered as elements in the table.

43. The method of claim 42 further comprising displaying an associated subset of the travel options when one of the elements is selected.

44. The method of claim 40 wherein a bin comprises a range of values associated with a respective criterion.

45. A computer program product for generating a graphical user interface, the computer program product residing on a computer readable medium and comprising instructions for causing a computer to:

receive travel options;

determine bins for criteria included in the travel options;

associate the travel options with the bins according to the criteria;

determine intersections of the bins according to the criteria;

generate a table based at least in part on the intersections of the bins; and

display the table as a graphical user interface with dimensions of the table corresponding to the bins determined according to the criteria.

46. The computer program product of claim 45 wherein a bin comprises a value associated with a respective criterion.

47. The computer program product of claim 45 wherein displaying the table displays the table with each of the bins rendered as elements in the table.

48. The computer program product of claim 47 further comprising instructions to: display an associated subset of the travel options when one of the elements is selected.

49. The computer program product of claim 45 wherein a bin comprises a range of values associated with a respective criterion.

Evidence Appendix

None

Related Proceedings Appendix

None